What is claimed is:

1. A method of fabricating a semiconductor device comprising:

depositing an oxide layer, a first conducting layer for a floating gate, a dielectric layer, and a second conducting layer for a control gate in sequence on a semiconductor substrate including a device isolation layer;

forming gates by removing some part of the oxide layer, the first conducting layer, the dielectric layer, and the second conducting layer;

forming a mask pattern for a self-aligned source over the substrate including the gates;

removing the device isolation layer exposed between the gates;

performing an ion implantation process; and

eliminating damage generated during the ion implantation process or the removal process of the device isolation layer.

2. A method as defined by claim 1, further comprising:

washing the substrate from which the damage has been eliminated through a cleaning process; and

forming an insulating layer over the resulted substrate.

3. A method as defined by claim 1, wherein the first and the second conducting layers are formed of polysilicon.

4. A method as defined by claim 1, wherein the dielectric layer is an oxide-nitride-oxide (ONO) layer.

5. A method as defined by claim 1, wherein the device isolation layer is removed by means of dry etching.

6. A method as defined by claim 5, wherein the dry etching is performed by applying a top power between 800W and 1500W under a pressure between 100 mTorr and 300 mTorr.

7. A method as defined by claim 5, wherein the dry etching is performed using C_4F_8 between 3 sccm and 5 sccm, CHF_3 between 2 sccm and 6 sccm, O_2 between 1 sccm and 5 sccm, and Ar between 100 sccm and 300 sccm.

8. A method as defined by claim 1, wherein the damage generated during the ion implantation process or the removal process of device isolation layer is eliminated by means of a chemical dry etching process.

9. A method as defined by claim 8, wherein the chemical dry etching process employs remote plasma in order to prevent ions from entering into a reaction chamber and to allow reaction only by radicals.

10. A method as defined by claim 8, wherein the chemical dry etching is an isotropic etching.

11. A method as defined by claim 8, wherein the chemical dry etching is performed by applying microwave power between 300W and 500W under a pressure between 200 mTorr and 250 mTorr.

12. A method as defined by claim 8, wherein the chemical dry etching is performed using CF_4 between 200 sccm and 280 sccm and O_2 between 40 sccm and 80 sccm.